

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER NO. 80-6

NPDES NO. CA0027995

WASTE DISCHARGE REQUIREMENTS FOR:

SIGNETICS CORPORATION
SUNNYVALE
SANTA CLARA COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region, (hereinafter called the Board) finds that:

1. Signetics Corporation (hereinafter called the discharger), a manufacturer of printed circuits, located at 811 East Arques Avenue, Sunnyvale, submitted an application dated July 30, 1979 for renewal of waste discharge requirements and a permit to discharge wastes under the National Pollutant Discharge Elimination System.
2. The discharge is presently governed by Waste Discharge Requirements, Order No. 75-7 adopted by the Board on February 18, 1975 as amended by Order No. 78-35 adopted on June 20, 1978.
3. The discharge presently consists of 50,000 gallons per day of reject water from a reverse osmosis water purification system. This waste is discharged to a storm drain tributary to Calabazas Creek and San Francisco Bay. The discharger by application dated October 11, 1979 proposes to expand the reverse osmosis operation and the waste discharge to 400,000 gallons per day. This discharge is designated E-001.
4. The discharger by application dated November 15, 1979 proposes to discharge, from their facility at 3600 Peterson Street, Sunnyvale, 100,000 gallons per day of reject water from another reverse osmosis water purification system. This waste will also be discharged to a storm drain tributary to Calabazas Creek. This discharge is designated E-002.
5. A Water Quality Control Plan for the San Francisco Bay Basin was adopted by the Board on April 8, 1975. The Basin Plan contains water quality objectives for San Francisco Bay.
6. The beneficial uses of Calabazas Creek and South San Francisco Bay are:
 - a. Recreation
 - b. Fish migration and habitat
 - c. Habitat and resting for waterfowl and migratory birds
 - d. Industrial water supply
 - e. Esthetic enjoyment
 - f. Navigation

7. The Board has notified the discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for the discharge and has provided them with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.
8. This project is exempt from the provisions of Chapter 3 (commencing with Section 21100) of Division 13 of the Public Resources Code (CEQA) pursuant to Section 13389 of the California Water Code.
9. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED, that Signetics Corporation in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder and the provisions of the Federal Water Pollution Control Act, and regulations and guidelines adopted thereunder shall comply with the following:

A. Prohibitions (E-001 and E-002)

1. The discharge of sanitary sewage to waters of the State is prohibited.
2. The average daily flow shall not exceed:

E-001: 400,000 gallons per day

E-002: 100,000 gallons per day.

B. Effluent Limitations (E-001 and E-002)

1. The discharge of an effluent containing constituents in excess of the following limits is prohibited:

<u>Constituents</u>	<u>Units</u>	<u>30-Day Average</u>	<u>Maximum Daily</u>
E-001:			
Total Suspended Solids	lbs/day	17	34
	kg/day	8	15
	mg/l	5	10
Chlorine	mg/l		0.0
Total Dissolved Solids	mg/l	-	1000
E-002:			
Total Suspended Solids	lbs/day	4	8
	kg/day	2	4
	mg/l	5	10
Chlorine	mg/l		0.0
Total Dissolved Solids	mg/l	-	1000

2. The discharge shall not have a pH of less than 6.5 nor greater than 8.5.
3. In any representative set of samples the waste as discharged shall meet the following limit of quality:

TOXICITY:

The survival of test fishes in 96 hour bioassays of the effluent shall achieve a median of 90% survival for three consecutive samples and a 90 percentile value of not less than 70% survival for 10 consecutive samples.

C. Receiving Water Limitations

1. The discharge of waste shall not cause the following conditions to exist in waters of the State at any place.
 - a. Floating, suspended, or deposited macroscopic particulate matter or foam;
 - b. Bottom deposits or aquatic growths;
 - c. Alteration of temperature, turbidity, or apparent color beyond present natural background levels;
 - d. Visible, floating, suspended, or deposited oil or other products of petroleum origin;
 - e. Toxic or other deleterious substances to be present in concentrations or quantities which will cause deleterious effects on aquatic biota, wildlife, or waterfowl, or which render any of these unfit for human consumption either at levels created in the receiving waters or as a result of biological concentration.
2. The discharge of waste shall not cause the following limits to be exceeded in waters of the State in any place within one foot of the water surface:
 - a. Dissolved oxygen 5.0 mg/l minimum. Annual median - 80% saturation. When natural factors cause lesser concentration(s) than those specified above, then this discharge shall not cause further reduction in the concentration of dissolved oxygen.
 - b. Dissolved sulfide 0.1 mg/l maximum
 - c. pH Variation from natural ambient pH by more than 0.2 pH units.

3. The discharge shall not cause a violation of any applicable water quality standard for receiving waters adopted by the Board or the State Water Resources Control Board as required by the Federal Water Pollution Control Act and regulations adopted thereunder. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the Federal Water Pollution Control Act, or amendments thereto, the Board will revise and modify this Order in accordance with such more stringent standards.

D. Provisions

1. Neither the treatment nor the discharge of pollutants shall create a nuisance as defined in the California Water Code.
2. The discharger shall comply with all Sections of this Order immediately.
3. The requirements prescribed by this Order supersedes the requirements prescribed by Order No. 75-7 and 78-35 adopted on February 18, 1975 and June 20, 1978, respectively. Order Nos. 75-7 and 78-35 are hereby rescinded.
4. The discharger shall comply with all items of the attached "Standard Provisions and Reporting Requirements" dated April 1977 except A.5, A.12 and B.5.
5. This Order expires February 19, 1985. The discharger must file a Report of Waste Discharge not later than 180 days in advance of such date as application for issuance of new waste discharge requirements.
6. This Order shall serve as a National Pollutant Discharge Elimination System permit pursuant to Section 402 of the Federal Water Pollution Control Act, or amendments thereto, and shall take effect at the end of ten days from date of hearing provided the Regional Administrator of the U. S. Environmental Protection Agency has no objections.

I, Fred H. Dierker, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on February 19, 1980.

FRED H. DIERKER
Executive Officer

Attachments:

Standard Provisions & Reporting
Requirements dated April 1977
Self-Monitoring Program

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

SELF-MONITORING PROGRAM
FOR

SIGNETICS CORPORATION

SUNNYVALE, SANTA CLARA COUNTY

NPDES NO. CA 0027995

ORDER NO. 80-6

CONSISTS OF

PART A

AND

PART B

PART B

I. DESCRIPTION OF SAMPLING STATIONS

A. Effluent

<u>Station</u>	<u>Description</u>
E-001	At any point in the outfall from 811 East Arques Avenue between the point of discharge and the point at which all waste tributary to that outfall is present.
E-002	At any point in the outfall from the 3600 Peterson Street property between the point of discharge and the point at which all waste tributary to that outfall is present.

II. SCHEDULE OF SAMPLING AND ANALYSIS

- A. The schedule of sampling and analysis shall be that given as Table I.
- B. Reports shall be submitted quarterly.

I, Fred H. Dierker, Executive Officer, hereby certify that the foregoing Self-Monitoring Program:

1. Has been developed in accordance with the procedure set forth in this Regional Board's Resolution No. 73-16 in order to obtain data and document compliance with waste discharge requirements established in Regional Board Order No. 80-6.
2. Does not include the following paragraphs of Part A:

C.4, C.5.c., C.5.d., C.5.e., D.4, E.4, F.3.c., and F.3.e.
3. Is effective on the date shown below.
4. May be reviewed at any time subsequent to the effective date upon written notice from the Executive Officer or request from the discharger, and revisions will be ordered by the Executive Officer.

FRED H. DIERKER
Executive Officer

Attachment:
Table 1 (2 pages)

Effective Date 3/4/80

TABLE I
SCHEDULE FOR SAMPLING, MEASUREMENTS, AND ANALYSIS

Sampling Station	E-001 & E-002
TYPE OF SAMPLE	G
Flow Rate (mgd)	Q
BOD, 5-day, 20° C, or COD (mg/l & kg/day)	
Chlorine Residual & Dosage (mg/l & kg/day)	Q
Settleable Matter (ml/1-hr. & cu. ft./day)	
Total Suspended Matter (mg/l & kg/day)	Q
Oil & Grease (mg/l & kg/day)	
Coliform (Total or Fecal) (MPN/100 ml) per req't	
Fish Toxicity, 96-hr. TL ₅₀ % Survival in undiluted waste	Y
Ammonia Nitrogen (mg/l & kg/day)	
Nitrate Nitrogen (mg/l & kg/day)	
Nitrite Nitrogen (mg/l & kg/day)	
Total Organic Nitrogen (mg/l & kg/day)	
Total Phosphate (mg/l & kg/day)	
Turbidity (Jackson Turbidity Units)	
pH (units)	D
Dissolved Oxygen (mg/l and % Saturation)	
Temperature (°C)	Q
Apparent Color (color units)	
Secchi Disc (inches)	
Sulfides (if DO ≤ 5.0 mg/l) Total & Dissolved (mg/l)	
Arsenic (mg/l & kg/day)	
Cadmium (mg/l & kg/day)	
Chromium, Total (mg/l & kg/day)	
Copper (mg/l & kg/day)	
Cyanide (mg/l & kg/day)	
Silver (mg/l & kg/day)	
Lead (mg/l & kg/day)	

[illegible]

LEGEND FOR TABLE

TYPES OF SAMPLES

G == grab sample
O == observation

TYPES OF STATIONS

E = waste effluent station

FREQUENCY OF SAMPLING

Y = once each year
Q = once each calendar quarter
W = once each week
D = once each day